

Work Order ID 67513

Saturday, March 26, 2011 9:10:19 AM

APRIL



Page 1

Item ID: D350-689-017

Accept



Setup Start



Revision ID:

Stop



Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 3/28/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 3/31/2011 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan: *mf*

Date: *11-03-27* Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

DSI 9499

A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-017 CHG001

8/10/01

11-03-27 BG 11-3-31

110

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

11/4/11 22.0

120

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

8/10/01

(42)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67513

Saturday, March 26, 2011 9:10:19 AM



Page 2

Item ID: D350-689-017

Accept



Setup Start



Revision ID:

Stop



Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 3/28/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 3/31/2011 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-689-017 Location: <u>S2</u> PPP Rev: <u>Draft</u>								
140 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

11/4/11

(2)

11/4/01

MAF
11-04-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





Saturday, March 26, 2011 9:10:17 AM

Page 1

[illegible]**Required Date:** 3/31/2011

Required Qty: 2.00

Comments: IPP Rev:A new issue DD 10.04.23 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN5-4A 		Purchased	No			110	Each	99.0000	2	4		11/4/11	
Bolt													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST337				99					
				108408				99					
D4071-041 		Manufactured	No			110	Each	12.0000	2	4		11/2/11	
Shoulder Harness Assembly													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST267				12					
				58228				2					
				60941				10					
MS21042L5 		Purchased	No			110	Each	890.0000	2	4		11/2/11	
Nut													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST300				890					
				114813				26					
				115594				168					
				116105				496					
				116548				200					
NAS1149D0516J 		Purchased	No			110	Each	184.0000	4	8		11/4/11	20
Washer													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST298				184					
				114797				184					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV 0

REF TCCA STC: SH02-33

REF FAA STC: SR01620NY

REF EASA STC: EASA.IM.R.S.01453

REF BRAZILIAN STC: 2005S03-09

REFERENCE ONLY

PURPOSE:

TO PROVIDE AN OPTIONAL SHOULDER HARNESS KIT TO BE INSTALLED ON THE D350-689-011/-021 DUAL HIGH BACK SEAT INSTALLATIONS.

CHANGE:

ADD OPTIONAL D350-689-017 SHOULDER HARNESS KIT (4 POINT INERTIA REEL) TO PARTS LIST OF IIN-D350-689 REV A AND ICA-D350-689 REV 0 AS DETAILED BELOW.

PARTS LIST:

Qty -017	Part Number	Description
X	D350-689-017	SHOULDER HARNESS KIT (4 POINT INERTIA REEL)
2	D4071-041	SHOULDER HARNESS ASSY
2	AN5-4A	BOLT
4	NAS1149D0516J	WASHER
2	MS21042L5	NUT (OR MS21042-5)

INSTRUCTIONS:

TO INSTALL D350-689-017 SHOULDER HARNESS KIT:

1. DRILL Ø0.323 HOLES AS INDICATED ON SHEET 2, DETAIL "A" OF THIS SERVICE INSTRUCTION FOR THE INERTIA REEL.
2. DEBURR AND TOUCH UP DRILLED HOLES AS INDICATED ON IIN-D350-689 SECTION 3.1 ITEM 5 (PG 4).
3. GUIDE SHOULDER HARNESS WEBBING THRU D3031-1 LOOP BY REMOVING LOOP FIRST, POSITIONING WEBBING AND FINALLY REPLACING D3031-1 LOOP. TORQUE FASTENERS TO 15-25 in-lbs.
4. INSTALL INERTIA REEL OF D4071-041 HARNESS ASSY USING THE HARDWARE PROVIDED AS PER FIGURE 1 (SHEET 2). ALIGN INERTIA REEL TO ENSURE WEBBING IS STRAIGHT. TORQUE FASTENERS TO 100-140 in-lbs.
5. REPEAT STEPS 3 & 4 FOR THE SECOND SHOULDER HARNESS.
6. INSTALL D4071-041 LAP BELT ASSY (QTY 2) USING EXISTING HARDWARE PROVIDED WITH D350-689-041/-043 DUAL HIGH BACK SEAT ASSEMBLY. SEE FIGURE 2 (SHEET 2) FOR REFERENCE.






WEIGHT AND BALANCE:

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-017 SHOULDER HARNESS KIT (Seat's Fwd position)	4.4 lb 2.00 kg	-18.2 in -0.46 m	- 80.1 in-lb -0.92 m-kG	60.7 in 1.54 m	267 in-lb 3.08 m-kG
D350-689-017 SHOULDER HARNESS KIT (Seat's Aft position)	4.4 lb 2.00 kg	-18.2 in -0.46 m	- 80.1 in-lb -0.92 m-kG	64.7 in 1.64 m	285 in-lb 3.28 m-kG

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.04.13
CERT. NO.: SH02-33
ISSUE NO.: 1

A	NEW ISSUE.	JPH	10.04.13	
REV.	DESCRIPTION	BY	DATE	
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.	N/A	DSI 9499	SHEET 1 OF 2	
APPROVED		TITLE	SCALE	
DE APPR.		SHOULDER HARNESS KIT	NTS	
DATE	10.04.13	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

D350-689-041/-043
DUAL HIGH BACK
SEAT ASSEMBLY

D3031-1
LOOP

D4071-041
(SHOULDER HARNESS)

Ø 0.323

0.50

2.25

REFERENCE ONLY **DETAIL A**
PLATE REWORK
PARTS REMOVED FOR CLARITY

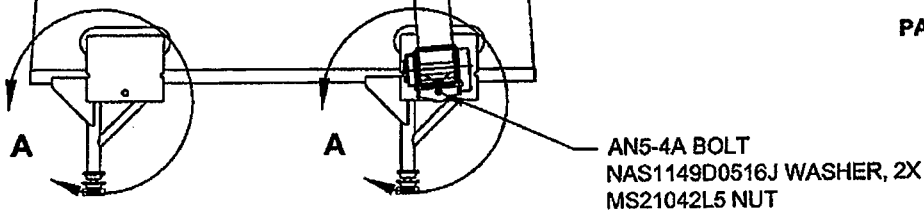


FIGURE 1
DUAL HIGH BACK SEAT ASSEMBLY
WITH D350-689-017
ONE HARNESS ASSY SHOWN

USE EXISTING
HARDWARE TO
INSTALL LAP
BELT ASSY

D4071-041
(LAP BELT ASSY)

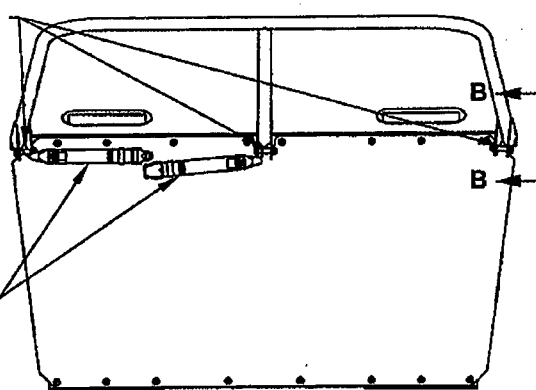
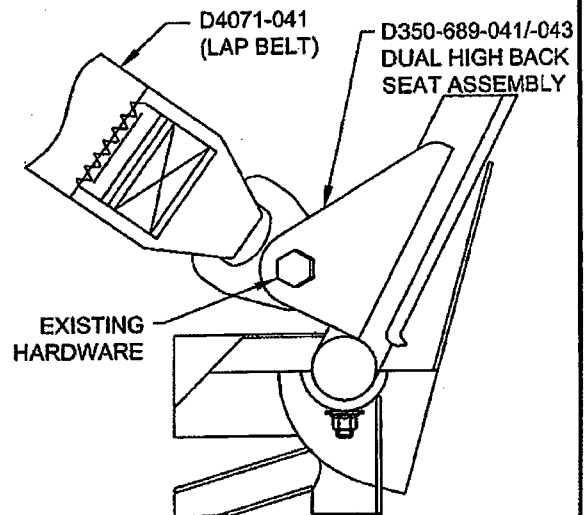


FIGURE 2
DUAL HIGH BACK SEAT ASSEMBLY
WITH D350-689-017
ONE LAP BELT ASSY SHOWN FOR CLARITY



SECTION VIEW B-B
LAP BELT ASSY INTL
(ROTATED VIEW)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.04.13
CERT. NO.: SH02-33
ISSUE NO.: 1

DESIGN	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
MFG. APPR.	N/A
APPROVED	<i>[Signature]</i>
DE APPR.	<i>[Signature]</i>
DATE	10.04.13

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. REV. A
DSI 9499 SHEET 2 OF 2
TITLE SCALE
SHOULDER HARNESS KIT NTS

COPYRIGHT © 2010 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.